

STATE OF CALIFORNIA
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION

CLEANUP AND ABATEMENT ORDER NO. 98-026

REQUIRING LOS ANGELES CITY HARBOR DEPARTMENT
HY "C" TANE CORPORATION
AND
WILLIAMS TRANSPORTATION COMPANY AND OTHER UNNAMED CONTRIBUTORS
TO CLEANUP AND ABATE
CONDITIONS OF SOIL AND GROUND WATER POLLUTION
CAUSED BY THE RELEASE OF
PETROLEUM HYDROCARBONS

INTRODUCTION

Releases of diesel fuel have been documented at property leased and operated by Hy "C" Tane Corporation (HCTC) located in San Pedro, California. Adjacent property and waters of the State have been adversely impacted by these releases. Investigations have been conducted that document extensive soil and groundwater contamination that remains in place despite some remediation measures taken by the Port of Los Angeles (POLA).

The California Regional Water Quality Control Board, Los Angeles Region, finds:

1. The Los Angeles City Harbor Department (POLA), HCTC and Williams Transportation Company (WTC) (hereinafter collectively called the discharger) discharged petroleum hydrocarbons into soil and waters of the State. HCTC leased and operated an aboveground liquid hydrocarbon storage tank farm, called the Hy "C" Tane Tank Farm (HCTTF). Four above-ground storage tanks (AST) stored gasoline and diesel for sale to the local fishing fleet. The HCTTF is located at 2186 Signal Place, San Pedro, between Berths 72 and 73 of the Main Channel within the Port of Los Angeles (Figure 1). HCTC leased Berths 72-73 from the POLA from 1950, ceasing the operations on September, 26, 1995. WTC is a trucking company that transported diesel to HCTTF in December 1994.
2. In May 1992 and January 1993, Pennzoil, immediately adjacent to the HCTTF on the south and west, conducted site investigations for lease renewal. The results, prepared by Secor, are documented in the *Report of Site Characterization Pennzoil's San Pedro Terminal*, dated August 24, 1992 and *Report of Additional Site Characterization Pennzoil's San Pedro Terminal*, dated April 16, 1993. The reports indicated that the northeastern portion of Pennzoil's San Pedro Terminal has been contaminated by diesel fuel. Soil samples collected south and west of the HCTTF exhibited diesel fuel concentrations up to 45,000 ppm. Free product, up to 1.95 feet, was found in two monitoring wells, one immediately south and one immediately west of the HCTTF. Pennzoil reports that since beginning operations in the 1950s, it has never stored diesel fuel on this site, as documented in the 1992 report.

June 24, 1998

3. In 1993, HCTTF conducted tank and pipeline integrity testing at the request of POLA. The tank integrity testing results, documented in April 19, 1993 report, prepared by Converse Environmental West, indicated that a 210,000-gallon diesel "Tank A" and a 10,500-gallon gasoline "Tank D" were in good condition and free of leaks. The pipeline testing results, prepared by Petroleum Contractors, Inc., indicated that the lines tested are "tight and have no leaks at this point in time." However, POLA found that the pipeline testing was inadequate. In 1996, Tanks A, C (18,000-gallon diesel tank), and D were tested by Pacific Technical Services (PTS). At that time, Tank B and the access catwalks had been demolished. The PTS report indicated that (1) Tank A showed evidence of rivet leaks at the exterior of the tank and the underside of the tank had corroded; (2) Tank C had leaked based on staining of the concrete pedestal on the south side of the tank; and (3) Tank A was in good condition. Tanks C and D were demolished by the POLA in August 1996.
4. On December 18, 1994, WTC delivered #2 diesel fuel to Tank A. Approximately 3,000 gallons of diesel, volume estimated by WTC, overflowed from the 20,000-gallon AST onto the surrounding unpaved soil surface. The spill covered approximately two thirds of the facility and was contained by a 20-foot high containment wall. WTC mobilized a vacuum truck and recovered approximately 600 gallons of standing diesel. The remainder of the diesel fuel percolated down into the soil within the containment area.

From December 29, 1994 to February 7, 1995, approximately 100 tons of the top-one-foot of contaminated soil were removed from the site. To delineate the extent of residual soil contamination resulting from the WTC spill, subsurface investigations were conducted by Mesa Environmental Consulting and Technologies, Inc. (MECTI), under contract to WTC, in December 94 and April 1995. Results of subsurface investigations indicated that soil contamination is present from surface to groundwater, at 8 feet below ground surface (bgs) and the presence of total recoverable petroleum hydrocarbons at levels up to 59,000 ppm. The sand layer at 6 feet bgs was saturated with diesel which flowed into the investigation trench and reached a thickness of 0.5 feet. These results indicated that the soil underlying the HCTTF may have been impacted by other releases at the site prior to the WTC incident.

It is difficult to quantify the extent of soil contamination resulting from the WTC spill. Diaz Yourman & Associates, under contract to MECTI, estimated the vertical extent of soil impact from the diesel spill to be the top 2.2 feet, as documented in the *Geotechnical Investigation Hy-C-Tane Tank Farm*, dated June 20, 1995. However, a report entitled, *Results of Calculation of Extent of Soil Impact From Diesel Spill*, dated July 16, 1997, by Geraghty & Miller, Inc., under contract to the POLA, concluded that diesel fuel had impacted not only soil but also groundwater. This was based on the thickness of the vadose zone beneath the tank farm (6 to 8 feet), heterogeneous geology resulting in coarser backfill material potentially acting as preferential diesel fuel pathways, rain events and water pooling after the spill event, and gravitational and capillary forces.

5. In 1996 and 1997, POLA conducted site investigations to delineate the extent of soil and groundwater contamination present at HCTTF. Results are summarized in *Revised Draft Site Investigation Report Hy-C-Tane Tank Farm*, dated June 3, 1997 and *Results of*

Further Investigation Hy-C-Tane Tank Farm, dated July 9, 1997, prepared by Geraghty & Miller, Inc.. The soil contamination has extended off-site and along the off-site pipeline to the fuel distribution area with diesel concentration up to 78,000 ppm. The soil plume is fully delineated. The free product plume has extended off-site with product thickness up to 2.27 feet and is not fully delineated beyond the south boundary. Based on a conservative assumption of a site-wide, six-inch-product plume, the estimated volume of free product present ranges from 100,000 to 200,000 gallons. Based on the bail-down test, the free product appears to recharge into groundwater wells quickly within several hours.

6. On February 23, 1998, the U.S. Coast Guard (USCG) received a verbal notification regarding an oil discharge within the Port of Los Angeles. The oil sheen originated from Berth 72 and flowed north to the Main Channel, reaching Mobile Oil Corporation at Berth 239. The oil sheen was approximately 300-feet wide and 2,000-feet long. The USCG has informed Regional Board staff that it believes this oil is being released from a source beneath Berth 72, and that an intermittent oil discharge occurs during the rainy season or low tide.
7. On April 6, 1998, the USCG received a verbal notification regarding an oil discharge within the Los Angeles Harbor near Berth 72. Oil present in soil and groundwater had been washed away by water released from a broken water line, resulting in a mixture of oil flowing into the ocean beneath Berth 72 via the storm drain. The oil sheen was observed to be approximately 20-feet wide along the wharf on April 7, 1998.
8. In mid 1998, the HCTTF site will be paved before a new tenant moves on site. The new tenant proposed to retro-fit the existing Tank A and install a new horizontal AST and a new pipeline to the fuel distribution area. The vertical tank will be upgraded with double bottoms and a leak detection systems installed for tanks and pipeline, and the new pipeline double-walled.
9. Based on the above findings, the free product plume emanating from the site is impacting the waters of the State which is a violation of the California Water Code (CWC), Section 13385.
10. To mitigate the impact, POLA initiated a phased approach to address soil and groundwater contamination. On April 29, 1998. POLA submitted *Phase I Workplan for Installation and Operation of a Free-floating Hydrocarbon Recovery System*, dated April 29, 1998, prepared by McLaren Hart, Inc. for on-site product removal by skimmers. POLA has implemented a free product removal program by hand bailing since May 11, 1998 as an interim measure before the product recovery systems of Phase I and II are in place. As stated in the April 30, 1998 letter from the POLA to the Regional Board, future activities will include Phase II off-site product removal by skimmers and soil remediation.
11. The Regional Board adopted an amended *Water Quality Control Plan for the Coastal Watersheds of Los Angeles and Ventura Counties (Basin Plan)* on June 13, 1994. The Basin Plan designates beneficial uses and establishes water quality objectives for inland surface waters, ground waters, coastal waters and wetlands.

12. Beneficial uses designated for Los Angeles Harbor and the coastal area include, but are not limited to: commercial and sport fishing, marine habitat, rare, threatened, or endangered species, shellfish harvesting, water contact recreation, and non-contact water recreation. Groundwater underlying POLA is in hydraulic connection with surface waters supporting beneficial uses.
13. This Order is an action taken for the protection of the environment and, as such, is exempt from the provisions of the California Environmental Quality Act in accordance with California Code of Regulations, Title 14, Chapter 3, Section 15321.

IT IS HEREBY ORDERED, pursuant to Water Code Section 13304, that the Los Angeles City Harbor Department, Hy "C" Tane Corporation, Williams Transportation Company, and any unnamed contributors to be named later when identified, shall comply with the following:

1. Cleanup and abate the condition of soil and ground water pollution and threatened pollution caused by the release of petroleum hydrocarbons by implementing the following actions:
 - a. Complete a groundwater assessment to assess the extent of groundwater contamination originating from the on-site source, and implement a quarterly groundwater monitoring program including surface water stations next to Berth 72. A groundwater and surface water sampling and analysis plan shall be submitted for review and approval. Water samples shall be analyzed, at a minimum, for gasoline, diesel, benzene, toluene, ethylbenzene, xylenes, methyl tert-butyl ether, and lead. Quarterly groundwater monitoring reports shall be submitted within 30 days after the quarter ends, with the first report beginning February 1, 1999.
 - b. Initiate a phased cleanup and abatement program with the cleanup of any remaining soil and groundwater contamination and the abatement of threatened pollution sources as highest priority.

Free product recovery shall be implemented by hand bailing as an interim measure, followed by skimmer recovery for on-site groundwater plume as Phase I and off-site plume as Phase II. The following reports shall be submitted for review and approval during each phase of product recovery effort:

- (1) Phase I on-site product recovery report, including pump test data and any additional data necessary to design Phase II.
- (2) Phase II off-site Remedial Action Plan (RAP), including the well locations for additional off-site product recovery wells.
- (3) Phase III RAP for active pumping, in the event that skimming recovery can not prevent the free product plume upon the groundwater from migrating

into harbor water. Total fluid recovery shall be implemented to reverse the hydraulic gradient and cease any oil release into harbor water.

Soil contamination and the dissolved plume present at tidal influence depth can act as a continuing source and shall be remediated. As documented in the April 29, 1998 report, POLA proposed soil excavation and bioventing for on-site soil contamination inside the tank farm and potential bioventing for off-site soil contamination outside the tank farm. An on-site soil RAP shall be submitted including the extent and quantities of soil to be excavated and future bioventing design. After completion of on-site soil remedial excavation, a report summarizing the actual on-site soil remedial activity shall be submitted. After completion of free product removal, an off-site soil and dissolved plume RAP shall be submitted for review and approval including soil bioventing design and groundwater treatment design.

- c. The activities specified in Items a and b above shall be conducted, as necessary, according to the schedule of work shown in Attachment A, or as subsequently revised and approved by the Executive Officer as the work proceeds.
 - d. Monthly progress reports detailing all activities implemented and results obtained during the previous month including product recovery, as required by this Order, shall be submitted to this Board by the 15th day of the following month, commencing July 15, 1998. These reports can be in a letter format. The discharger may make application to change the frequency of reporting for Executive Officer approval.
 - e. A final report describing any completed activities, as detailed in Attachment A, and results shall be submitted to this Board within 30 days of completion of any phase of the soil and ground water cleanup and investigation is completed.
 - f. The investigation and cleanup program shall be directed and conducted by a registered civil engineer or geologist, or a certified engineering geologist or hydrogeologist.
2. Abandonment of any groundwater wells(s) at the site must be reported to the Executive Officer in advance. Any groundwater well removed must be replaced within three months at a location approved by the Executive Office. With justification, the Executive Officer may approve of the abandonment of groundwater wells without replacement. When a well is removed, all work shall be completed in accordance with all applicable well abandonment requirements.
3. The Regional Board's authorized representative shall be allowed:
- a. Entry upon premises where a regulated facility or activity is located, conducted, or where records are kept, under the conditions of this Order;

- b. Access to copy any records that are kept under the conditions of this Order;
 - c. To inspect any facility, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order; and
 - d. To photograph, sample, and monitor for the purpose of assuring compliance with this Order, or as otherwise authorized by the California Water Code.
- 4. This Order is not intended to permit or allow the discharger to cease any work required by any other Order issued by this Regional Board, nor shall it be used as a reason to stop or redirect any investigation or cleanup or remediation programs ordered by this Board or any other agency.
 - 5. The discharger shall provide to the Regional Board advance notice of any planned physical alterations to the facility or planned changes in the facility's activities that may affect compliance with this Order.
 - 6. This Order does not exempt the discharger from compliance with any other laws, regulations, or ordinances which may be applicable, nor does it legalize these waste treatment and disposal facilities and it leaves unaffected any further restraints on those facilities which may be contained in other statutes or required by other agencies.
 - 7. The discharger shall provide to the Regional Board advance notice of any planned change in name, ownership, or control of the facility; provide notice to any succeeding owner or operator of the existence of Order by letter; forward a copy of such notification to the Regional Board.
 - 8. This Order may be revised by the Regional Board through its Executive Officer as additional information on this site becomes available. Upon request by the discharger, and for good cause shown the Executive Officer may defer, delete or extend the date of compliance for any action required of the discharger under this Order. The authority of the Regional Board, as contained in the California Water Code (CWC), to order investigation and cleanup additional to that described herein, is in no way limited by this Order.
 - 9. Section 13304 of the CWC allows the Regional Board to recover reasonable expenses from responsible parties to oversee cleanup and abatement of unregulated discharges which have adversely affected waters of the State.
 - 10. This Order in no way limits the authority of the Regional Board as contained in the CWC, to require additional investigation and cleanup pertinent to this project. It is the intent of this Regional Board to issue Waste Discharge Requirements or other Orders pursuant to Sections 13260, 13304, and 13350 of the CWC when appropriate to facilitate this cleanup and abatement activity. Additionally, continued monitoring of the ground water quality beneath this facility after the completion of this cleanup and abatement activity may be required.

11. Failure to comply with the terms or conditions of this Order may result in imposition of civil liabilities, either administratively by the Regional Board or judicially by the Superior Court in accordance with Section 13350 of the CWC, and/or referral to the Attorney general of the State of California for such action as he may deem appropriate.

Ordered by: _____
DENNIS A. DICKERSON
Executive Officer

Dated: June 24, 1998

/RC

ATTACHMENT A

	<u>Date</u>
A. GROUNDWATER ASSESSMENT AND MONITORING	
1. Submit a workplan for off-site groundwater assessment at the south boundary and a groundwater monitoring program	July 1, 1998
2. Begin off-site groundwater investigation	July 15, 1998
3. Submit an off-site groundwater investigation report	October 1, 1998
4. Submit a quarterly groundwater and surface water sampling and analysis plan	October 15, 1998
5. Begin quarterly groundwater and surface water monitoring	Fourth quarter, 1998
6. Submit quarterly groundwater and surface water monitoring report	February 1, May 1, August 1, and November 1, each year, starting February 1, 1999
B. FREE PRODUCT RECOVERY	
1. Submit a Phase I final report	August 15, 1998
2. Submit a Phase II remedial action plan	August 20, 1998
3. Begin off-site product recovery	October 1, 1998
4. Submit a Phase III remedial action plan	To be determined
5. Submit a final report for product recovery	To be determined
C. SOIL AND GROUNDWATER REMEDIATION	
1. Submit an on-site soil remedial action plan	September 1, 1998
2. Begin on-site soil remedial excavation	October 1, 1998
3. Submit on-site soil remedial excavation report	December 1, 1998
4. Submit a workplan for groundwater and off-site soil remediation, after completion of free product recovery	To be determined
5. Begin groundwater and off-site soil remediation	To be determined
6. Submit a final report for groundwater and off-site soil remediation	To be determined